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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,197	07/01/2000	John B. Ferber	08011.3006-00000	6838
22852 7590 11/27/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER	
			LAFORGIA, CHRISTIAN A	
			ART UNIT	PAPER NUMBER
		2131		
	v		MAIL DATE	DELIVERY MODE
			11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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TO EXPIRE 3 MONTH(THIS COMMUNICATION event, however, may a reply be tim	١.	BO) DAYS,			
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under 35 U.S.C. § 119(a)-(d) or (f).				
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Rule 17.2(a)).					
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	Application No.	Applicant(s)					
	09/610,197	FERBER ET AL.					
Office Action Summary	Examiner	Art Unit					
•	Christian La Forgia	2131					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. lely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 17 Se	eptember 2007.						
2a)⊠ This action is FINAL . 2b)☐ This							
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>2-5 and 7-30</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>2-5 and 7-20</u> is/are allowed.							
6)⊠ Claim(s) <u>21-30</u> is/are rejected.							
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>01 July 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
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Attachment(s)		(DTO 442)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4)						
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F						
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DETAILED ACTION

- 1. The amendment of 17 September 2007 has been noted and made of record.
- 2. Claims 2-5 and 7-30 have been presented for examination.
- 3. Claims 1 and 6 have been cancelled as per Applicant's request.
- 4. Claims 2-5 and 7-20 have been indicated as being allowable. The Examiner's statement for reasons for allowance can be found in the Office Action of 31 March 2005.

Response to Arguments

- 5. Applicant's arguments filed 17 September 2007 have been fully considered but they are not persuasive.
- 6. The Examiner disagrees with the Applicant's arguments regarding the 35 U.S.C. 101 rejections of claims 21-23, 25, and 27-30. The Applicant argues on page 11 of their response of 17 September 2007 that in *State Street Bank & Trust Co.*, 149 F.3d 1373 the Federal Circuit held that the tangible result of a process applying a mathematical algorithm was statutory because it result in "a final share price momentarily fixed for recording and reporting purposes." The Examiner agrees that the *State Street Bank* case produces a concrete, tangible and useful result, namely recording and reporting the momentarily fixed share price. The Applicant argues that the click probability estimate is used to determine whether to present an Internet advertisement to a customer, yet there is no positive recitation of presenting an Internet advertisement to a customer after the uncertainty of the click probability estimate has been reduced, thereby failing to produce a useful, concrete and tangible result. In other words, the reducing of the uncertainty of the click probability estimate does not produce a useful, concrete and tangible result since it is the mere manipulation of data. Subsequently presenting an internet advertisement based on the

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reduced uncertainty of the click probability estimate would result in a useful, concrete and tangible result, similar to *State Street Bank*'s recording and reporting the momentarily fixed share price. Therefore, the 35 U.S.C. 101 rejection of claims 21-23, 25, and 27-30 has been maintained. The Examiner erred in rejecting claims 24 and 26 since they recite the limitation "presenting the selected advertisement to the customer" (see similar but not necessarily identical claim language), and therefore has withdrawn the rejection of claims 24 and 26.

- The Applicant argues on pages 13-16 that the combination of Guyot and d'Eon does not teach an uncertainty of the click probability estimate based at least in part on a number of times the advertisement has been presented and reducing the uncertainty of the click probability estimate after the advertisement has been presented with respect to independent claims 21 and 25. The Examiner respectfully disagrees with this allegation. It is clear from the previous Office Action that the Examiner interprets the Applicant's claimed "uncertainty of the click probability estimate" as the effectiveness of advertisement. The Applicant does not refute this interpretation, but merely alleges that the prior art does not teach the Applicant's argued claim limitations. The Examiner directs the Applicant's attention to MPEP § 2131, in particular the discussion of ipsissimis verbis. Ipsissimis verbis states that the elements of the invention must be arranged as required by the claim regardless of the identity of terminology. In other words, the fact that the claim language is interpreted in a particular way and the prior art does not use identical terminology as that of the Applicant, yet teaches the elements of the claim language, is not enough to distinguish the instant application over the prior art.
- 8. As noted above, the Examiner disagrees with the Applicant's argument that the prior art fails to disclose an uncertainty of the click probability estimate based at least in part on a number

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of times the advertisement has been presented. As noted in column 3, lines 23-36, d'Eon takes into account the number of times a user accesses an advertisement, or as interpreted by the Examiner, how many times an advertisement has been displayed on a webpage or shown to a user. Therefore, since the Examiner has interpreted the Applicant's claimed uncertainty of the click probability estimate as a measure of the effectiveness of the advertisement, and d'Eon takes into account the number of times an advertisement has been displayed (column 3, lines 23-36) in determining the effectiveness of an advertisement, the combination of references teaches the argued claim limitations and the rejection of independent claims 21 and 25 is maintained.

- 9. As noted above, the Examiner disagrees with the Applicant's argument that the prior art fails to show reducing the uncertainty of the click probability estimate after the advertisement has been presented. d'Eon shows, at least at column 3, lines 27-36, that the effectiveness is calculated based on subsequent transactional activity, wherein subsequent transactional activity is defined at column 3, lines 7-13, thereby, adjusting the effectiveness of the advertisement after it has been displayed. The Examiner holds that adjusting the effectiveness of the advertisement is directly proportional to the uncertainty of the click probability estimate, inasmuch that the more effective an advertisement, the lower the level of uncertainty associated with its effectiveness or that a user will click the advertisement. Therefore, the combination of references discloses reducing the uncertainty of the click probability estimate after the advertisement has been presented, and the rejection of independent claims 21 and 25 is maintained.
- 10. See further rejections set forth below.

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Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 21-23, 25, and 27-30 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. In order for a claim to satisfy the requirements of 35 U.S.C. 101, the claimed invention must "transform" an article or a physical object to a different state or thing and produce a useful, concrete, and tangible result. See section IV(C)(2) of the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility." The invention of independent claims 21 and 25 does not provide for a transformation of an article or physical object as it is merely manipulating data and performing mathematical calculations. The claim fails the second part of the test of the requirements in that it fails to produce a useful, concrete, and tangible result, such as storing the uncertainty of the click probably estimate or displaying an advertisement based on the uncertainty of the click probability estimate. As such the claim lacks utility and is therefore rejected under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

- 13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 14. Claims 21-30 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,119,098 to Guyot et al., hereinafter Guyot, in view of U.S. Patent No. 6,006,197 to d'Eon et al, hereinafter d'Eon.

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15. As per claim 21, Guyot discloses a computer-implemented method for selecting Internet advertisements for presentation, comprising:

establishing a customer profile for a customer, the customer profile including long-term attributes (data entered by subscriber) related to a category of advertisements of interest to the customer and short-term attributes related to a product of interest to the customer (recent web - sites visited) (column 2, lines 37-42, column 3, lines 60-65, column 6, lines 31-39); and

for an Internet advertisement,

using the long-term attributes and the short-term attributes to compute a click probability estimate representing a likelihood that the customer will respond to the Internet advertisement (column 1, line 56 to column 2, line 8, column 4, lines 15-23, i.e. provides advertisements to the 'client application' that are targeted to each individual subscriber, based on a personal profile by that subscriber, using the subscriber statistics to choose advertisements to be sent to the client).

- 16. Guyot discloses keeping track of the number of times an Internet advertisement has been displayed (column 2, lines 23-29) and using an estimate to determine whether to display an advertisement to the customer (column 1, lines 56-65), and taking action after the advertisement has been presented to the customer (column 11-23).
- 17. Guyot does not disclose determining an uncertainty of the click probability estimate and using the uncertainty to determine whether to present the Internet advertisement to the customer.
- 18. d'Eon discloses determining a conditional probability of a subsequent action by the user, which is drawn to the uncertainty of the click probability (column 1, lines 46-55, i.e. monitoring which advertisements customer's click through to the advertiser's website, monitoring which advertisements are the most effective at drawing client's the advertiser's website), and

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after the Internet advertisement has been presented to the customer, reducing the uncertainty of the click probability estimate (column 3, lines 7-36, i.e. adjusting the effectiveness depending on client's transactional activity).

- 19. Guyot and d'Eon are both drawn to target advertising based on at least user profiles.
- 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an uncertainty of the click probability estimate based at least in part on a number of times the advertisement has been displayed and using both the click probability estimate and the uncertainty to determine whether to present the advertisement to the customer, since d'Eon states at column 2, lines 39-43 that such a modification would provide for a cost-effective and easy to use method for assessing the effectiveness of Internet advertisements.
- 21. Regarding claim 22, Guyot teaches adjusting the customer profile based on types of advertisements previously responded to by the customer (column 4, lines 15-23, i.e. number of times each advertisement has been effectively displayed on the subscriber's system).
- 22. Regarding claim 23, Guyot teaches adjusting the customer profile based on Internet sites visited by the customer (column 2, lines 37-42, i.e. client application keeps track of Internet sites that the subscriber has accessed).
- 23. Regarding claims 24, 26, and 30, d'Eon teaches presenting the Internet advertisement to the customer (column 3, lines 23-28, i.e. user accesses website with internet advertisements),

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receiving a response to the Internet advertisement from the customer (column 3, lines 7-17, i.e. transactional activity); and

updating the click probability estimate based on the customer's response (column 3, lines 28-37).

24. As per claim 25, Guyot discloses a computer-implemented method for optimizing Internet advertising selection, comprising:

creating a customer profile corresponding to a customer (column 2, lines 37-42, column 3, lines 60-65, column 6, lines 31-39);

establishing an advertisement profile for each of a plurality of advertisements, each advertisement profile including an expected revenue based on potential placement of the corresponding advertisement (column 3, line 66 to column 4, line 23);

for each advertisement, using the customer profile to determine an estimated probability that the customer will respond to the advertisement (column 1, line 56 to column 2, line 8); and selecting which of the plurality of advertisements to present to the customer based on the

estimated probability of the customer responding to the advertisement (column 1, line 56 to column 2, line 8).

- 25. Guyot discloses keeping track of the number of times an Internet advertisement has been displayed (column 2, lines 23-29), and taking action after the advertisement has been presented to the customer (column 11-23).
- 26. Guyot does not disclose determining an uncertainty based on the amount of times the advertisement has been placed and placing the advertisement based on the probability of the

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customer responding, the expected revenue, and the measure of uncertainty, and after a selected advertisement has been presented to the customer, reducing the measure of uncertainty corresponding to the selected advertisement.

d'Eon discloses determining a conditional probability of a subsequent action by the user, which is drawn to the uncertainty of the click probability (column 1, lines 46-55, i.e. monitoring which advertisements customer's click through to the advertiser's website, monitoring which advertisements are the most effective at drawing client's the advertiser's website), and

placing the advertisement based on the probability of the customer responding, the expected revenue, and the measure of uncertainty (column 3, lines 23-28),

after a selected advertisement has been presented to the customer, reducing the measure of uncertainty corresponding to the selected advertisement (column 3, lines 7-36, i.e. adjusting the effectiveness depending on client's transactional activity).

- 28. Guyot and d'Eon are both drawn to target advertising based on at least user profiles.
- 29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an uncertainty of the click probability estimate based at least in part on a number of times the advertisement has been displayed and using both the click probability estimate and the uncertainty to determine whether to present the advertisement to the customer, since d'Eon states at column 2, lines 39-43 that such a modification would provide for a cost-effective and easy to use method for assessing the effectiveness of Internet advertisements.

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30. Regarding claims 27-29, d'Eon teaches wherein the response is either a click selecting the advertisement, a request for more information, or a purchase of an item in the advertisement (column 3, lines 7-17).

Conclusion

- 31. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 32. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- 33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.
- 34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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35. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian LaForgia Patent Examiner Art Unit 2131

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